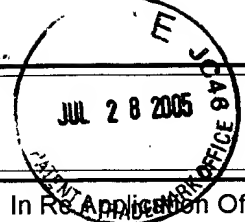


AFW

 TRANSMITTAL LETTER (General - Patent Pending)	Docket No. 293.000218US
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In Re Application Of: **Engelhardt et al.**

Application No.	Filing Date	Examiner	Customer No.	Group Art Unit	Confirmation No.
09/600,208	07/12/2000	Thong Q. Nguyen	24041	2872	7902

Title: **OPTICAL ARRANGEMENT IN THE ILLUMINATION BEAM PATH OF A MICROSCOPE**

COMMISSIONER FOR PATENTS:

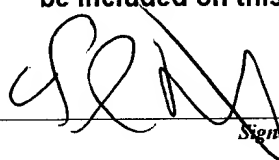
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in the above identified application.

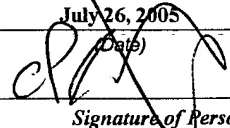
- ☒ No additional fee is required.
- ☐ A check in the amount of _____ is attached.
- ☒ The Director is hereby authorized to charge and credit Deposit Account No. **50-0822** as described below.
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Signature

Dated: **July 26, 2005**

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CC:



ATTORNEY DOCKET NO. 000218US

**IN THE UNITED STATES PATENT AND TRADEMARK
OFFICE**

Applicant: ENGELHARDT, Johann et al.

Examiner: NGUYEN, Thong Q.

Serial No.: 09/600,208

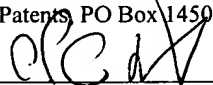
Art Unit: 2872

Filed: July 12, 2000

For: OPTICAL ARRANGEMENT IN
THE ILLUMINATION BEAM
PATH OF A MICROSCOPE

Certificate of Mailing

I certify that this Reply Brief is being deposited on July 26, 2005, with the U.S. Postal Service as first class mail under 37 C.F.R. §1.8 and is addressed to Commissioner of Patents, PO Box 1450, Alexandria, Va. 22313-1450


C. Paul Maliszewski
Registration No. 51.990

REPLY BRIEF

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Honorable Sir:

Appellants submit this Reply Brief in response to the Examiner's Answer, mailed May 27, 2005, which was in response to a Substitute Brief on Appeal filed March 9, 2005. The Substitute Brief on Appeal was in reply to the Notification of Non-Compliant Appeal Brief (37 CFR 41.37) mailed February 9, 2005. The aforementioned Notification of Non-Compliant Appeal Brief was issued in response to a Substitute Brief on Appeal filed February 24, 2004. The Substitute Brief on Appeal filed February 24, 2004 was in reply to a Notification of Non-Compliant Appeal Brief issued January 26, 2004. The Notification of Non-Compliant Appeal Brief of January 26, 2004 was issued in response to a Brief on Appeal filed November 18, 2003. The Brief on Appeal was regarding the

decision of the Primary Examiner to finally reject Claims 17, 22, 23, 25, 28, 29, and 32-39, as set forth in the final Office Action of April 14, 2003.

Further Issues Presented for Review

The Primary Examiner has raised new issues in the Examiner's Answer to which Appellants now respond:

- 1.) Is there motivation to use Hara to solve the problem of overillumination of an entry pupil of an objective?

On page 14 of the Examiner's Answer, the Primary Examiner responded to Appellants' arguments that the references cited by the Examiner teach away from the invention. The Primary Examiner further asserted that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; or that the claimed invention must be expressly suggested in any one or all of the references. However, Appellants have not made the arguments stated by the Primary Examiner. The Primary Examiner further states that the test of obviousness is what the combined teachings of the references would have suggested to those of ordinary skill in the art (*In re Keller*, 642 F.2d 412, 208 USPQ 871 (CCPA 1981)). Appellants maintain that Yamamoto and Hara fail this test. In fact, as shown on page 9 of the March 9, 2005 Substitute Appeal Brief, Hara teaches away from the present invention. Specifically, Hara discloses an optical arrangement wherein light from source 2 is expanded and collimated before it is incident on pupil 5. The beam is rectangular before it is incident on the circular pupil 5. Thus, Hara clearly teaches overillumination of pupil 5, which results in the inefficient exclusion of a portion of the incident beam. The present invention eliminates overillumination by the light source to

maximize the efficiency of the microscope. The background of the present invention (Page 1, lines 6-16) specifically discusses the limitations of apparatuses of the type disclosed by Hara, wherein the light source overilluminates an optical component. Thus, one skilled in the art looking to solve the problem of overillumination would not look to Hara for a solution. A *prima facie* case of obviousness can be rebutted if one of the cited references teaches away from the claimed invention. See *In re Geisler*, 43 U.S.P.Q. 2d 1362, 1366 (Fed. Cir. 1997).

3.) Did the Primary Examiner apply improper hindsight in combining the references?

The Primary Examiner asserts on page 15 of the Examiner's Answer that the knowledge to combine the references was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure. Appellants respectfully disagree. Hara's invention is based on overillumination, one problem that the present invention is solving. Therefore, Appellants fail to see how one skilled in the art would solve the problem of overillumination by turning to a reference embodying that very problem. That is, the modification of Yamamoto by Hara only makes sense in the art in light of the Appellants' disclosure.

Conclusion

For the reasons set forth in Appellants' March 9, 2005 Substitute Appeal Brief and for the reason set forth above, Appellants respectfully submit that Claim 17 is non-obvious over Yamamoto in view of Hara, and therefore, patentable under 35 U.S.C. 103(a). Claims 25, 28, 32, 33, and 39 depend, directly or indirectly, from Claim 17. Since Claim 17 is patentable in light of the cited references, Claims 25, 28, 32, 33, and 39 are patentable in light of the cited references.

Claims 22 and 23 depend, directly or indirectly, from Claim 17. Since Claim 17 is patentable in light of the cited references, Claims 22 and 23 are patentable in light of the cited references.

Claim 29 depends from Claim 17. Since Claim 17 is patentable in light of the cited references, Claim 29 is patentable in light of the cited references.

Claims 34-36 depend, directly or indirectly, from Claim 17. Since Claim 17 is patentable in light of the cited references, Claims 34-36 are patentable in light of the cited references.

Claim 37 depends indirectly from Claim 17. Since Claim 17 is patentable in light of the cited references, Claim 37 is patentable in light of the cited references.

For the reasons set forth in Appellants' March 9, 2005 Substitute Appeal Brief and for the reason set forth above, Appellants respectfully submits that Claim 38 is non-obvious over Yamamoto in view of Hara, and further in view of Dreessen, and therefore patentable under 35 U.S.C. 103(a).

Accordingly, Appellants pray that this Honorable Board will reverse the Primary Examiner's rejection of Claims 17, 22, 23, 25, 28, 29, and 32-39.

Respectfully submitted,



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Dated: July 26, 2005
CPM/